

Claims;

1. An actinic ray curable ink comprising a colorant and an epoxidized fatty acid ester or an epoxidized fatty acid glyceride.

2. The actinic ray curable ink of claim 1, wherein the ink further comprises an oxetane compound and a cation polymerization initiator.

3. The actinic ray curable ink of claim 1, wherein the epoxidized fatty acid ester is epoxy methyl stearate, epoxy butyl stearate or epoxy octyl stearate.

4. The actinic ray curable ink of claim 1, wherein the epoxidized fatty acid glyceride is a compound selected from the group consisting of epoxidized soybean oil, epoxidized castor oil and epoxidized safflower oil.

5. The actinic ray curable ink of claim 1, wherein content of epoxidized fatty acid ester or epoxidized fatty acid glyceride is 10 - 80 weight% based on the total weight of the ink.

6. The actinic ray curable ink of claim 5, wherein content of epoxidized fatty acid ester or epoxidized fatty acid glyceride is 10 - 50 weight% based on the total weight of the ink.

7. The actinic ray curable ink of claim 2, wherein an ratio (A/B) of the epoxidized fatty acid ester or epoxidized fatty acid glycerides (A) to the oxetane compound (B) is 1/9 - 9/1 by weight.

8. The actinic ray curable ink of claim 2, wherein the cation polymerization initiator is selected from the group consisting of diazonium salt, iodonium salt, sulfonium salt, an iron allene complex and an organic polyhalogenide compound.

9. The actinic ray curable ink of any one of claim 1, wherein a viscosity of the ink at 23 °C being at least 50 mPa·s.

10. Printed matter wherein an image is formed by depositing the actinic ray curable ink of any one of claim 1 on a recording material.